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| EXAMINER | |
|---|---|
| MOORE, IAN N | |

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| 2616 | |

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/832,237 | CHOI ET AL. | |
| | Examiner | Art Unit | |
| | Ian N. Moore | 2616 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *09 May 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1,3-5,7,8,13 and 17-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) *13 and 17-20* is/are allowed.

6)☒ Claim(s) *1,3-5,7 and 8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Decker (U.S. 6,195,338) in view of 3GPP TS 25.302 (hereinafter refers to as TS 25.302).

**Regarding Claim 1**, Decker discloses a method for determining by a UTRAN a persistence value (see FIG. Variables p(i) and/or persistent rule P) for adjusting a number of access preambles (see FIG. access requests) from a plurality of UEs (see FIG. number of active mobile stations M, n(i); see col. 2, lines 50-65) requiring assignment of a common packet channel (CPCH) (see col. 2, lines 35-40; an access channel), the method comprising the steps of:

counting the number of the access preambles detected in an access preamble period having a predetermined period for each transport format (see FIG. and col. 2, lines 44-56; note that the number of access messages/preambles received over a time interval are counted by the mobile radio network for each radio frame/format); and

determining the persistence value based on the number of counted access preambles for each transport format (see FIG. Variables p (i) and/or persistent rule P; see col. 2, lines 49 to col. 3, lines 17; note that the base station B determines the persistence rule P and/or variables p (i) parameters according the counted access messages/preambles requests for each radio frame/format); and

transmitting the determined persistence value to the UEs (see col. 3, lines 18-30; mobile stations n (i)) in a cell controlled by a Node B (see FIG. a base station B within a radio network; see col. 2, lines 44-47; see col. 3, lines 7-35; persistence rule P and/or variables p (i) parameters are send to mobile stations n (i)).

Decker does not explicitly disclose information related to an amount of transmission data and a data rate. However, each transport format containing information related to an amount of transmission data and a data rate is well known in the art as defied by the standard. In particular, TS 25.302 teaches in a UTRAN system (section 6.2, 7.1.11, 9.0), each transport format containing information related to an amount of transmission data (see section 7.1.6; Transport format contains dynamic part attributes (i.e. block size, set size, interval)) and a data rate (see section 7.1.6; Transport format contains one semi-static part attributes (i.e. coding rate, static rate, etc.)). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a specific arrangement of Transport Format, as taught by TS 25.302 in the system of Decker, so that it would allow mapping of data onto L1 via L1/L2 interface; see TS 25.302 section 7.1; and also by using a specific transport format according to the standard will also provide interoperability and compatibility with other systems.

**Regarding Claim 5**, Decker discloses a method for determining by a UTRAN a persistence value (see FIG. Variables p (i) and/or persistent rule P) for adjusting a number of CD (collision Detection) preambles (see FIG. Detection of collision; see col. 2, lines 35-42) from a plurality of UEs (see FIG. number of active mobile stations M, n

(i); see col. 2, lines 50-65) requiring assignment of a common packet channel (CPCH) (see col. 2, lines 35-40; an access channel), the method comprising the steps of:

counting the number of the CD preambles detected in an access preamble period having a predetermined period for each transport format (see FIG. and col. 2, lines 44-56; note that the number of collision detection information in the access messages/preambles received over a time interval are counted by the mobile radio network for each radio frame/format); and

determining the persistence value based on the number of counted CD access preambles for each transport format (see FIG. Variables p (i) and/or persistent rule P; see col. 2, lines 49 to col. 3, lines 17; note that the base station B determines the persistence rule P and/or variables p (i) parameters according the counted collision detection information access messages/preambles requests for each radio frame/format);

transmitting the determined persistence value to the UEs (see col. 3, lines 18-30; mobile stations n (I)) in a cell controlled by a Node B (see FIG. a base station B within a radio network; see col. 2, lines 44-47; see col. 3, lines 7-35; persistence rule P and/or variables p (I) parameters are send to mobile stations n (I)).

Decker does not explicitly disclose information related to an amount of transmission data and a data rate. However, each transport format containing information related to an amount of transmission data and a data rate is well known in the art as defied by the standard. In particular, TS 25.302 teaches in a UTRAN system (section 6.2, 7.1.11, 9.0), each transport format containing information related to an amount of transmission data (see section 7.1.6; Transport format contains dynamic part attributes (i.e. block size, set size, interval)) and a data rate (see section 7.1.6; Transport format

contains one semi-static part attributes (i.e. coding rate, static rate, etc.)). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a specific arrangement of Transport Format, as taught by TS 25.302 in the system of Decker, so that it would allow mapping of data onto L1 via L1/L2 interface; see TS 25.302 section 7.1; and also by using a specific transport format according to the standard will also provide interoperability and compatibility with other systems.

**Regarding claims 3 and 7**, the combined system of Decker and TS 25.302 discloses all claimed limitations. Decker discloses persistence value is a unit of channel (see col. 3, line 35-55). TS 25.302 discloses the persistence value (section 10.3.3.8; persistency value) is determined in a unit of physical common packet channel (PCPCH) (section 10.3.3.8; section 8.1; PCPCH). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize PCPCH, as taught by TS 25.302 in the system of Decker, so that it would provide UE to send and receive on multiple Transport channels which are mapped on different physical channels simultaneously depending on the service capability and requirement; see TS 25.302 section 8; and also by using a standard channel according to the standard will also provide interoperability and compatibility with other systems.

**Regarding Claims 4 and 8**, the combined system of Decker and TS 25.302 discloses all claimed limitations. Decker discloses persistence value is a unit of channel (see col. 3, line 35-55). TS 25.302 teaches CPCH set (section 10.3.3.8; FIG. 2, section 6.1, 6.2, 7.2, 8.1,8.2; CPCH set). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize CPCH, as taught by

TS 25.302 in the system of Decker, so that it would provide fast power control, changing rate, and collision detection; see TS 25.302, page 22 section 7.2; and also by using a standard channel set according to the standard will also provide interoperability and compatibility with other systems.

**Second set of rejection**

3. Claims 1, 3, and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dupont (U.S. 5,729,542) in view of TS 25.302.

**Regarding Claim 1**, Dupont discloses a method for determining by a UTRAN a persistence value (see FIG. 4, P-Persistence parameter) for adjusting a number of access preambles (see FIG. 5, number of access requests) from a plurality of UEs (see FIG. 1, mobile station 105) requiring assignment of a common packet channel (CPCH), the method comprising the steps of:

counting the number of the access preambles detected in an access preamble period having a predetermined period for each format (see FIG. 5, access request period which is predetermined access burst period 505; see col. 4, lines 54-56; see col. 6, lines 60 to col. 6, lines 12; note that the number of access messages/preambles within a predefined access burst period are counted by the base station for each frame/format); and

determining the persistence value based on the number of counted access preambles for each format (see FIG. 4, P-Persistence parameters; see col. 4, lines 48-54, 56 to col. 6, lines 12; note that the base station determines the persistence/probability

parameters according the counted access messages/preambles requests for each frame/format);

transmitting the determined persistence value to the UEs in a cell controlled by a Node B (see FIG. 2, BSS 220 and/or serving GSN 230; see col. 3, lines 35-60; see col. 6, lines 1-10; the persistence/probability parameter are transmitted to the subscribers by BSS/GSN).

Dupont does not explicitly disclose transport format (TF) that contains information related to an amount of transmission data and a data rate. However, each transport format containing information related to an amount of transmission data and a data rate is well known in the art as defied by the standard. In particular, TS 25.302 teaches in a UTRAN system (section 6.2, 7.1.11, 9.0), each transport format containing information related to an amount of transmission data (see section 7.1.6; Transport format contains dynamic part attributes (i.e. block size, set size, interval)) and a data rate (see section 7.1.6; Transport format contains one semi-static part attributes (i.e. coding rate, static rate, etc.)). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a specific arrangement of Transport Format, as taught by TS 25.302 in the system of Dupont, so that it would allow mapping of data onto L1 via L1/L2 interface; see TS 25.302 section 7.1; and also by using a specific transport format according to the standard will also provide interoperability and compatibility with other systems.

**Regarding claim 3**, the combined system of Dupont and TS 25.302 discloses all claimed limitations. Dupont discloses persistence value is a unit of channel (see col. 5, line 62 to col. 6, line 6). TS 25.302 discloses the persistence value (section 10.3.3.8;

persistency value) is determined in a unit of physical common packet channel (PCPCH) (section 10.3.3.8; section 8.1; PCPCH). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize PCPCH, as taught by TS 25.302 in the combined system of Dupont and TS 25.302, so that it would provide UE to send and receive on multiple Transport channels which are mapped on different physical channels simultaneously depending on the service capability and requirement; see TS 25.302 section 8; and also by using a standard channel according to the standard will also provide interoperability and compatibility with other systems.

**Regarding claim 4**, the combined system of Dupont and TS 25.302 discloses all claimed limitations. Dupont discloses persistence value is a unit of channel (see col. 5, line 62 to col. 6, line 6). TS 25.302 teaches CPCH set (section 10.3.3.8; FIG. 2, section 6.1, 6.2, 7.2, 8.1,8.2; CPCH set). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize CPCH, as taught by TS 25.302 in the combined system of Dupont and TS 25.302, so that it would provide fast power control, changing rate, and collision detection; see TS 25.302, page 22 section 7.2; and also by using a standard channel set according to the standard will also provide interoperability and compatibility with other systems.

4. Claim 5, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dupont in view of TS 25.302 and Parsa (US 20040081115A1).

**Regarding Claim 5**, Dupont discloses a method for determining by a UTRAN a persistence value (see FIG. 4, P-Persistence parameter) for adjusting a number of access preambles (see FIG. 5, number of access requests) from a plurality of UEs (see FIG. 1,

mobile station 105) requiring assignment of a common packet channel (CPCH), the method comprising the steps of:

counting the number of the access preambles detected in an access preamble period having a predetermined period for each format (see FIG. 5, access request period which is predetermined access burst period 505; see col. 4, lines 54-56; see col. 6, lines 60 to col. 6, lines 12; note that the number of access messages/preambles within a predefined access burst period are counted by the base station for each frame/format); and

determining the persistence value based on the number of counted access preambles for each format (see FIG. 4, P-Persistence parameters; see col. 4, lines 48-54, 56 to col. 6, lines 12; note that the base station determines the persistence parameters according the counted access messages/preambles requests for each frame/format);

transmitting the determined persistence value to the UEs in a cell controlled by a Node B (see FIG. 2, BSS 220 and/or serving GSN 230; see col. 3, lines 35-60; see col. 6, lines 1-10; the persistence/probability parameter are transmitted to the subscribers by BSS/GSN).

Dupont does not explicitly disclose transport format that contains information related to an amount of transmission data and a data rate. However, each transport format containing information related to an amount of transmission data and a data rate is well known in the art as defied by the standard. In particular, TS 25.302 teaches in a UTRAN system (section 6.2, 7.1.11, 9.0), each transport format containing information related to an amount of transmission data (see section 7.1.6; Transport format contains dynamic part attributes (i.e. block size, set size, interval)) and a data rate (see section 7.1.6;

Transport format contains one semi-static part attributes (i.e. coding rate, static rate, etc.)). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a specific arrangement of Transport Format, as taught by TS 25.302 in the system of Dupont, so that it would allow mapping of data onto L1 via L1/L2 interface; see TS 25.302 section 7.1; and also by using a specific transport format according to the standard will also provide interoperability and compatibility with other systems.

Neither Dupont nor TS 25.302 explicitly discloses CD (Collision Detection) preambles. However, Parsa teaches CD (Collision Detection) preambles (see FIG. 3-4, CD preamble; see page 3, paragraph 38-39). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize CD preamble, as taught by Parsa in the combined system of Dupont and TS 25.302, so that it would provide fast acquisition indication, and to avoid collision; see Parsa page 3, paragraph 38; page 1, paragraph 6.

**Regarding claim 7,** the combined system of Dupont, TS 25.302 and Parsa discloses all claimed limitations. Dupont discloses wherein persistence value is determined in a unit of channel as described above in claim 5.

TS 25.302 discloses the persistence value (section 10.3.3.8; persistency value) is determined in a unit of physical common packet channel (PCPCH) (section 10.3.3.8; section 8.1; PCPCH). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize PCPCH, as taught by TS 25.302 in the combined system of Decker and Parsa, so that it would provide UE to send and receive on multiple Transport channels which are mapped on different physical channels

simultaneously depending on the service capability and requirement; see TS 25.302 section 8; and also by using a standard channel according to the standard will also provide interoperability and compatibility with other systems.

**Regarding claim 8,** the combined system of Dupont, TS 25.302 and Parsa discloses all claimed limitations. Dupont discloses wherein persistence value is determined in a unit of channel as described above in claim 5. TS 25.302 teaches CPCH set (section 10.3.3.8; FIG. 2, section 6.1, 6.2, 7.2, 8.1,8.2; CPCH set). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize CPCH, as taught by TS 25.302 in the system of Decker, so that it would provide fast power control, changing rate, and collision detection; see TS 25.302, page 22 section 7.2; and also by using a standard channel set according to the standard will also provide interoperability and compatibility with other systems.

Also, note Parsa teaches CPCH set (see page 6, paragraph 71,73; page 8, paragraph 111-112). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize CPCH, as taught by Parsa in the combined system of Dupont and TS 25.302, so that it would provide channel resource assignment based on the traffic demand projection, and to avoid collision; see Parsa page 6, paragraph 71; page 1, paragraph 6.

### *Allowable Subject Matter*

5. **Claims 13 and 17-20** are allowed.

***Response to Arguments***

6. Applicant's arguments with respect to claim 1,3,4,5,7, and 8 have been considered but are moot in view of the new ground(s) of rejection.

**Regarding claims 1 and 5, the applicant argued that**, "...the cited reference merely discloses collision using DSMA-CD in a CPCH ...A conventional DSMA-CD only uses a single persistence value and does not teach determining a persistence value according to the properties of data, as described in present application...Dupont does not accumulated access preambles, Dupont cannot render unpatentable the determination of the persistence values...claim 1 relates to measuring a collision rate by allocation to the CPCH within a cell being served by a Node B the measured collision rate of the CRNC ...claim 1 uses persistence tests...claim 1 of the present application performs in each unit of Transport format in a Node B, but Dupont performs in each priority of subscriber/message..." in page 6, paragraph 2-4; page 7, paragraph 2,5,6; page 8, paragraph 2,3.

**In response to applicant's argument** that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., **DSMA-CD in a CPCH, accumulated, measuring a collision rate by allocation to the CPCH, the measured collision rate of the CRNC, or persistence tests**) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

**In response to applicant's argument, the examiner respectfully disagrees** with the above argument. Dupont discloses determining the persistence value based on the number of counted access preambles for each format (**see FIG. 4, P-Persistence parameters; see col. 4, lines 48-54, 56 to col. 6, lines 12; note that the base station determines the persistence/probability parameters according the counted access messages/preambles requests for each frame/format**). The applicant admitted that Dupont discloses performing in each message as stated above, and TS 25.302 discloses a specific form of Transport format as set forth in the above in the rejection. Thus, the combined system of Dupont and TS 25.302 disclosed determining of persistence value in each unit of Transport format as set forth in above rejection.

Dupont accumulated access preamble by counting the number of the access preambles detected in an access preamble period having a predetermined period for each format (**see FIG. 5, access request period which is predetermined access burst period 505; see col. 4, lines 54-56; see col. 6, lines 60 to col. 6, lines 12; note that the number of access messages/preambles within a predefined access burst period are counted by the base station for each frame/format**).

**Regarding claim 5, the applicant argued that,** "...Parsa does not cure any of the above defects of Dupont..." in page 8, paragraph 4.

**In response to applicant's argument, the examiner respectfully disagrees** with the argument above. Dupont discloses the argued claimed limitation as set forth in above response. Parsa teaches transport format (see page 8, paragraph 112; transport format) and CD (Collision Detection) preambles (see FIG. 3-4, CD preamble; see page 3,

paragraph 38-39), and utilizing persistence algorithm (see page 8, paragraph 111). Thus, the combined system of Dupont, TS 25.302 and Parsa discloses claimed invention.

**In response to applicant's arguments** against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In view of the above, **the examiner respectfully disagrees** with applicant's argument and believes that the references as set forth in the above rejections are proper.

***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian N. Moore whose telephone number is 571-272-3085. The examiner can normally be reached on 9:00 AM- 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 571-272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

INM
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PATENT EXAMINER, 2616